507.54

MADRAS GOVERNMENT MUSEUM.

Bulletin, Vol. V, No. 1.

ANTHROPOLOGY.

VISION OF THE URÁLIS AND SHOLAGAS;
MORE MARRIAGE CUSTOMS IN SOUTHERN INDIA;
HOOK-SWINGING; PALIYANS.

With Nine Plates.

Smithsonian Institution
JUL 20 19..
292859

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

[PRICE, 1 *rupee*.] 1903. [1 *shilling* 6 *pence*.]

Madras Government Museum Bulletins.

Vol. I.

No. 1.—Pearl and Chank Fisheries of the Gulf of Manaar.—E. Thurston.

No. 2.—Note on Tours along the Malabar Coast.—E. Thurston.

No. 3.—Rámésvaram Island and Fauna of the Gulf of Manaar.—E. Thurston.

No. 4.—Anthropology of the Todas and Kotas of the Nilgiri Hills; and of the Bráhmans, Kammálans, Pallis and Pariahs of Madras City.—E. Thurston.

Vol. II.

No. 1.—Anthropology of the Badagas and Irulas of the Nīlgiris; Paniyans of Malabar; Chinese-Tamil Cross; Cheruman Skull; Kuruba or Kurumba; Summary of Results.—E. Thurston.

No. 2.—Eurasians (Poorer Classes) of Madras and Malabar; Note on Tattooing; Malagasy-Nias-Dravidians; Toda Petition.—E. Thurston.

No. 3.—Kadirs of the Anaimalais; Malaiālis of the Shevaroys; Syllabus of Demonstrations; the Dravidian Head; the Dravidian Problem.—E. Thurston.

Vol. III.

No. 1.—Notes on some of the People of Malabar.—F. Fawcett. Mala Vêdars of Travancore.—Mrs. Evans. Miscellanea.

No. 2.—Sea Fisheries of Malabar and South Canara.—E. Thurston.

No. 3.—Nâyars of Malabar.—F. Fawcett.

Vol. IV.

No. 1.—Todas of the Nilgiris; Eurasian Schoolboys; Meriah Sacrifice Post; Walking through Fire; Malaiālis of the Shevaroys; Scissors People; Sorcery in Coimbatore; Nayādis of Malabar.—E. Thurston.

No. 2.—The Dravidian Head.—E. Thurston; Yánádis of Nellore.—T. Ranga Rao; Miscellanea.

No. 3.—Marriage Customs in Southern India; Deformity and Mutilation; Urális, Sholagas, and Irulas; Fire-walking in Ganjám; Corporal Punishment in Vernacular Schools.—E. Thurston.

MADRAS GOVERNMENT MUSEUM.

Bulletin, Vol. V, No. 1.

ANTHROPOLOGY.

VISION OF THE URÁLIS AND SHOLAGAS;
MORE MARRIAGE CUSTOMS IN SOUTHERN INDIA;
HOOK-SWINGING; PALIYANS.

With Nine Plates.

SMITHSONIAN
SEP 01 1993
LIBRARIES

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1903.

OBSERVATIONS ON THE VISION OF THE URÁLIS AND SHOLAGAS.

The Urális and Sholagas, on whom I made the following observations, were mostly the same individuals as those measured by Mr. Thurston, whom I accompanied to Dimbhum, and to whom I am very much indebted for the opportunity of examining these inhabitants of the Indian jungle.

I examined 65 Urális and 18 Sholagas, the subjects of investigation being visual acuity, colour vision and quantitative estimation of two visual illusions, a few observations being also made on other illusions.

These people were hardly ideal subjects for psychological experimentation. They came to us in a state of abject fear at the prospect of our examination, and in some cases continued so terrified throughout that their observations were of little value. In most cases, however, they soon found that we were comparatively harmless, and settled down to their observations satisfactorily, to become again much alarmed when they thought over the meaning and probable consequences of the examination.

The observations were conducted on the same lines as in my previous work in Torres Straits[1] and elsewhere. As usual I began the examination of an individual with Holmgren's wools and other tests of colour vision; but I will begin this exposition with a description of the acuteness of vision.

VISUAL ACUITY.

The test employed was that devised by Cohn, in which the letter E is exposed in various positions through a circular aperture in a card. A large letter E is pasted on a board and put into the hands of the native under examination, and he has to turn it round till its position corresponds with that of the letter shown to him. The procedure differed in one respect from that employed in Torres Straits,

[1] See 'Report of the Cambridge Anthropological Expedition to Torres Straits,' Volume II, Part I, 1901.

in that I began to show the E from a short distance, and gradually increased the distance till I reached a point at which the native could no longer recognize the position of the letter in four out of five times. The **E** used was of the No. 6 size, and the degree of acuity is expressed by a fraction, of which 6 is the denominator and the number of metres at which the position of the **E** was recognized is the numerator.

The observations were made in the open air. There were considerable differences of illumination, as some days were much more cloudy than others. Both Mr. Thurston and a Brahman forest ranger could, however, see quite as well on the dark as on the bright days, and I do not believe that the variations of illumination which occur in the open air, unless very great, have any appreciable influence on the acuity of vision.

The method was fairly readily acquired by most of the people, and, though some were very slow and had to be re-examined several times, there was no case in which I completely failed to get a result. I was struck by the fact that the older men acquired the method more readily and more intelligently than the younger men. This was in marked contrast to my experience in Torres Straits, where the boys and young men were, on the whole, distinctly quicker than the older men, probably owing to the influence of the school education the former had received. As usually happens, the natives had more difficulty in learning to distinguish between the positions of the E in which the three lines are horizontal than between those in which they are vertical.

I could not ascertain whether they had definite names which they applied to the four chief positions of the E, but they called the letter itself "*námam*," after the forehead sect-mark of the Vishnavites.

Fifty-five Urális and sixteen Sholagas were tested. The average vision of both groups taken together was $\frac{12 \cdot 4}{6}$ or 2·07. That of the Urális was $\frac{12 \cdot 2}{6}$ or 2·03; that of the Sholagas was $\frac{13 \cdot 2}{6}$ or 2·2. The Sholagas recognized the position of the letter a metre farther away than the Urális. The superiority of the Sholagas is, however, due to the fact that they were a younger and more able-bodied group of men

than the Urális. The former were all less than 45 years of age, and, if compared with Urális under 45, the difference between the two groups is much less, viz., $\frac{13\cdot2}{6}$ and $\frac{12\cdot9}{6}$.

The best result was given by a Sholaga who was serving under the Forest Department as bungalow watcher. He recognized the position of the E correctly at 18 metres. This man also seemed distinctly superior to the rest in general intelligence, though it may only have been that he had had more intercourse with the outside world, and was, in consequence, less timid and reserved.

The lowest acuity occurred in the case of an elderly man who only recognized the position of the letter at 1½ metres. He had some diffused haziness of the cornea, but this did not seem sufficient to account for his low acuity, and he probably had some change in the lens also.

Perhaps the most striking feature of the results, is the very small degree of variation shown in the group of men tested. The number of individuals who succeeded at each distance was as follows :—one at 1·5 metres, one at 5 metres, 2 at 8 m., 3 at 9 m., 3 at 10 m., 10 at 11 m., 15 at 12 m., 13 at 13 m., 10 at 14 m., 8 at 15 m., 3 at 16 m., and one each at 17 and 18 m. Fifty-six of the people, or 78·8 per cent., succeeded in the test between 11 and 15 metres inclusive.

The average visual acuity of the Urális and Sholagas corresponds very closely with that of the Torres Straits Islanders; the former being 2·07 and the latter 2·12. The latter, however, included a much large proportion of elderly men. The figures for the Torres Strait Islands, Sholagas and Urális under 45 years of age are 2·28, 2·2 and 2·15 respectively. If the Islanders had been tested with the No. 6 letter, they should have recognised its position at 13·7 m. as compared with the 13·2 m. of the Sholagas and the 12·9 m. of the Urális. The differences are so slight that one is justified in saying that the jungle tribe have the same visual acuity as the Islanders.

There was a distinct decrease in visual acuity with advancing age. The ages assigned to the people can only be a rough approximation to their real ages, but are probably not more than 5 years out in any case. Grouping the men according to periods of 5 years, the following are the results, the figures in brackets giving the number of individuals belonging to each period, while the acuity is expressed by the number of metres at which the letter

could be recognized: above 55 years of age, (5), acuity, 7·9 m.; 50–55, (3), 11·13; 45–50, (7), 11·1; 40–45, (10), 11·5; 35–40, (11), 13·5; 30–35, (13), 13·6; 25–30, (10), 13·0, and below 25 years, (12), the distance was 13·2 metres.

In Torres Straits the falling off in visual acuity began earlier, viz., between 35 and 40 years of age, and was much more marked. The uncertainty as to the accuracy of the ages in both communities is too great to allow one to attach much importance to the former difference, but the extent of the decrease in Torres Straits was so much greater than among the Urális and Sholagas as to leave no doubt that the influence of advancing age was smaller among the jungle folk than amoug the Islanders.

In nearly all individuals there was pigmentation of the conjunctiva, chiefly in the diffuse form; no isolated patches of pigment were seen such as I have observed elsewhere. In one or two cases the pigment was in distinct lines radiating from the edge of the cornea; a condition I have not observed elsewhere. In many cases there was a distinct ring of pigment surrounding the cornea of the same kind as that I observed in Torres Straits but less definite.

Injection and thickening of the conjunctiva was common, especially in the situation where pterygium is found, but there was no case of distinct pterygium involving the cornea. In several individuals, however, there was definite pinguicula.

Several of the older men had true arcus senilis, but the indefinite and superficial haziness resembling arcus, which was so common in Torres Straits, was here almost absent. The appearance of a blue ring round the margin of the cornea, which is probably due to a slight degree of this change, was often seen. In several cases corneal opacities were present, which were in nearly every case ascribed to small-pox. One man was almost completely blind in both eyes from extensive corneal scarring said to have been the result of small-pox, and another man had a blind and shrunken eyeball, of which the cause was doubtful.

COLOUR VISION.

All the natives who came to us were tested with Holmgren's wools. All those whose examinatiou suggested the possibility of defective colour vision were tested with Nagel's cards and Lovibond's tintometer, and the latter instrument

was also used to determine the thresholds for different colours by the same method which I had previously employed in Torres Straits and Egypt.[1] Of the 81 people tested, only one man, a Uráli, was definitely colour blind. He matched red with brown and green; green with grey; pink with blue and violet, and was a typical example of red-green blindness.

The general behaviour with the wools was an extreme example of the kind that I have called the "Torres Straits type," *i.e.*, red was confused with pink; green with blue; and blue with violet; while there was a tendency to put together the more faintly coloured wools according to shade and tint rather than according to colour-tone. These characteristics were present to a more marked degree than in Torres Straits, and in a larger proportion of individuals. There were only four individuals out of the 81 examined who did not show one or more of these characteristics. No less than 14 also matched or compared the pink test wool with violet wools, nearly always, however, with violets or purples which had a considerable amount of red in them and approached the pink in colour-tone. In this respect these people resembled the natives of Upper Egypt very closely. These matches were of a kind which would almost certainly indicate weakness of the red-green sense in an European, but for the same reasons which I have advanced in the case of the Egyptians, I do not believe that they indicated any degree of Daltonism, but were due to the influence of nomenclature probably combined with some degree of insensitiveness to blue. All succeeded in naming the discs correctly in Nagel's cards, and recognized red glasses in Lovibond's tintometer as readily as those of other colours. Many were exceptionally good with Nagel's test. It is, of course, impossible to say that some of these people may not have had some degree of weakness of the red-green sense, but I have little doubt that their behaviour was due to the causes I have indicated.

Rough observations with Lovibond's tintometer, sufficient to ascertain the existence or absence of any decided insensitiveness to red were made in many cases. A complete examination with this instrument in order to determine the thresholds for red, yellow and blue, was made on 14 individuals, and the results are shown in the following table:—

1 'Journal of Anthrop. Inst.,' 1901, XXXI, p. 229.

TABLE I.

Name.	Red.	Yellow.	Blue.
Nanjen	20	30	80
Chika Nanjan	40	20	70
Masana	15	30	80
Dundun	20	30	50
Jadaya	15	40	40
Javana	30	15	40
Jadaya Madha	15	20	50
Chika Jadaya	30	15	80
Dŏda Jadaya	40	40	100
Badra	20	20	80
Kethei	40	20	70
Jadaya	20	20	80
Komba	70	40	60
Bomma	60	30	50
Average	31·1	26·4	66·4
Maximum	70	40	100
Minimum	15	15	40
M.V.	13·53	7·86	15·51
$\frac{\text{M.V.}}{\text{A.}}$	·435	·297	·233

This examination is one requiring a large amount of care and demands prolonged attention, yet I had very few failures to obtain a definite result. Usually one period of rest was given during the series, and in two cases two rests were necessary before satisfactory thresholds were obtained. The method followed was exactly the same as that I used in Egypt, and the results corresponded very closely with those obtained in that country, the thresholds for the three colours being 31·1, 26·4 and 66·4 in the Indian tribes as compared with 28·6, 26·0 and 85·4 in the Egyptian peasants.

The results given opposite M.V. in Table I give the mean variations by which the results of the 14 individuals deviated from the average; they give a measure of the variability of the individuals of the group examined. For each colour the variation is less than in the case of the Egyptians, especially in the case of blue.

In comparing the groups in respect of variability, it is in some ways more satisfactory to take the mean variation in its relation to the average, and the figures indicating this relation are given in the bottom line of the table. These figures are very much smaller than those of the Egyptians, and slightly smaller than those of Murray Island.

The results with the tintometer are (i) that the thresholds for the different colours agree more closely with those of the natives of Upper Egypt than with those of Papuan or English subjects, the Indian natives seeming, however, to be somewhat more sensitive to blue than the Egyptians; and (ii) that the mean variations point to the conclusion that the Indian natives form a more homogeneous and less variable group than either the Egyptian or Papuan natives.

The language employed to denote colour showed exactly the same characteristics as those usually met with in uncivilized races. The Urális and Sholagas live in a region which lies between different linguistic districts; the people on the south being predominantly Tamil, while those on the north are Canarese. In correspondence with this position, the people used colour terms from both languages. The majority of the Urális and all the Sholagas applied to red and a crimson-purple the Canarese term *kempu*, while the minority of the Urális used the Tamil term *sikapu*. Those who used Tamil words called orange and yellow *manjal*; some of the others used the Canarese term *arsena*, while others called yellow *haseru*, the Canarese term for green, and either called orange *kempu* or could not give it a name.

No one used the Tamil word *pachai* for green, but nearly all called it *haseru*, while some called this colour *masalai* used otherwise for grey and brown. A few called green *kangu*. Blue and indigo were only called *nil* by four individuals. The others called blue *haseru*, *kala* or *karupu*. Indigo was almost unanimously called *kala*, *kara* or *karupu* (black).

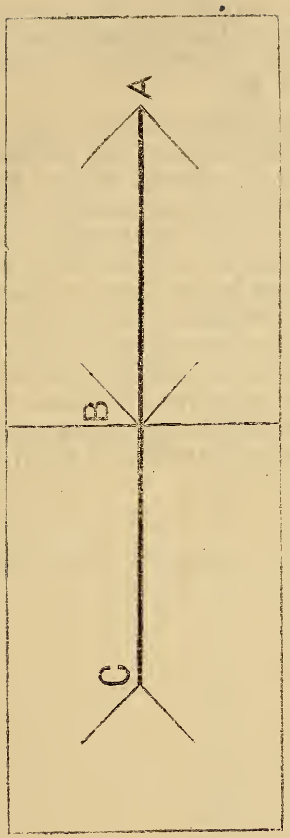
Violet was usually called either *haseru* or *karupu*; one man called this colour *káká* after the crow, and three men called it *kempu*. A very large number of names were applied to brown papers and wools, including *kempu*, *manjal*, *haseru*, *karupu*, *nila*, and *masalai*, while several called brown *puthi*, ash-colour, or *kangu* used otherwise for green. White was unanimously called *vellapu*. Black was usually named *karupu*, more rarely *kala*, *haseru*, *masalai*, or *nila*. Greys were usually called *vellapu* if light; *karupu*, *haseru*, *masalai* or *nila* if dark.

The only difference between the Urális and Sholagas was that the use of Tamil words was limited to the former. The vocabularies shew exactly the same peculiarities as those I have found in Torres Straits, Upper Egypt and elsewhere. There was perfectly definite nomenclature for red; less definite nomenclature for yellow; a definite term for green, which was, however, also used for brown and grey, and sometimes for black. Light blue was sometimes given the same name as green, but was usually called black, while the darker indigo was almost unanimously given the same name as black. The common Indian word for blue, *nil* or *nila*, was very little used, and just as often for black as for blue.

Violet was given the same name as other dark colours, but the red element in this colour was recognized by a few who called it *kempu*. There was no word for brown, objects of this colour being called red, yellow, green, black or grey according to their colour-tone and shade.

Corresponding to the defective nomenclature for blue, there was the same high threshold for this colour in the tintometer test which I have found in Murray Island and Upper Egypt, places characterized by the same defects of colour nomenclature. The threshold for blue was almost the same as that found in Murray Island. Here, as elsewhere, defective nomenclature for blue appears to be associated with a certain degree of insensitiveness to this colour.

There was an almost complete absence of the tendency common among many races, to name colours by direct comparison with natural objects, the only example of the tendency being that of the man who called violet *káká* (crow).



VISUAL ILLUSIONS.

Quantitative observations were made on two visual illusions, viz., the Müller-Lyer illusion, and the illusion depending on erroneous estimation of a vertical as compared with a horizontal distance.

The Müller-Lyer illusion was tested with an improved form of the apparatus I employed in Torres Strait. In this new form the lines have been made much thinner, while the general dimensions of the figure remain the same. The line of junction between the two parts of the instrument corresponds with the division between the two parts of the

figure instead of crossing the variable line as in the older form. The subject of the test has to adjust the instrument shown in the figure till the line B C seems to him to be equal to the line A B.

The results with this instrument are shown in Table II, which is constructed in the same manner as Table XIV in the Reports of the Torres Straits Expedition.[1] Each native had to adjust the apparatus five times by pushing in the slide till the two lines of the figure appeared equal to one another, and then he adjusted the apparatus five times by moving the slide in the reverse direction till the two parts again appeared equal. The average results for the first five observations are given in column B, those of the second five in column C, while the averages of the whole ten measurements are given in column A. The figures in these columns give the average of the length of the line B C which appeared equal to the line A B. The latter line was 75 mm. in length.

---

[1] These Reports may be consulted for the details of the method of investigation.

TABLE II.

Name.	A	B	M.V.	C	M.V.
Nanjan	62·9	65·8	1·76	60·0	3·60
Masana *	53·4	50·8	2·24	56·0	2·40
Banasi	51·1	51·8	3·84	50·4	2·48
Nanjen	57·8	59·0	2·00	56·6	3·28
Kalen	51·8	51·2	2·08	52·4	1·28
Raman	56·9	59·6	3·84	54·2	3·12
Badra *	56·1	58·8	1·76	53·4	1·68
Dundun *	57·2	59·0	1·60	55·4	2·08
Mari *	53·7	57·8	2·24	49·6	2·08
Nanjan	50·3	54·4	3·12	46·2	2·56
Badra	52·8	54·8	1·84	50·8	3·36
Raman *	48·3	51·6	2·08	45·0	2·40
Madhan *	46·9	47·6	2·32	46·2	2·16
Masana *	58·6	61·0	4·40	56·2	2·16
Badra	57·7	60·8	3·84	54·6	4·32
Reisan	58·7	60·2	1·84	57·2	2·24
Maran *	48·2	48·8	1·84	47·6	4·08
Mundei	54·0	55·2	2·16	52·8	1·44
Kunei	55·1	60·4	2·88	49·8	2·64
Sodala *	51·2	52·0	·80	50·4	·88
Javana	61·6	64·6	2·08	58·6	3·28
Jadaya Madha *	55·7	56·4	1·68	55·0	1·20
Kumba	57·9	56·6	1·28	59·2	3·76
Jadaya *	54·6	58·4	·88	50·8	1·04
Javana	63·2	65·2	4·96	61·2	2·08
Jadaya	59·1	56·6	4·88	61·6	2·24
Badra	59·7	64·0	1·60	55·4	1·28
Keta	53·2	58·8	3·04	47·6	1·12
Average	55·3	57·2	2·46	53·4	2·36
Average *	53·1	54·7	1·98	51·4	2·01

The first twenty individuals of this Table are Urális, and the last eight are Sholagas. The latter made distinctly higher measurements, but the number examined is too small to allow one to attach any great importance to this difference.

Neither people did these measurements well. It seemed doubtful in some cases whether they really understood what I wanted them to do. So much did this appear to be the case that I should hesitate as to whether the results were worthy of publication, if it were not that the figures seem to show that the people must have been doing their task more satisfactorily than observation of their behaviour indicated.

In the first place the average mean variations are not high—2·46 and 2·36 as compared with 2·77 and 2·03 of Murray Island natives, and 2·09 and 1·58 of English subjects.[1]

Secondly, the figures in columns B and C show exactly the same characteristic which I have found to be universally present with both civilized and uncivilized subjects. The average for the observations, when the variable is made equal to the standard by a process of shortening, is larger than when the movement takes place in the reverse direction. This feature is not only shown by the average, but occurs in the measurement of no less than 24 out of the 28 individuals tested.

Lastly, I noted eleven individuals as doing the test satisfactorily, so far as could be judged from observation of their demeanour. I have marked the names of these men with asterisks in Table II, and have given their results at the bottom of the Table; and it will be seen that, though their results differ from those of the whole group, the difference is not great. The conclusion based on their demeanour, that their observations were being made more satisfactorily, is confirmed by their mean variations which are distinctly smaller than those of the whole group.

These observations were not made with the same apparatus as employed in Torres Straits: the results in the two places are, therefore, not strictly comparable. Comparative observations carried out elsewhere have shown, however, that there is no great difference in the results obtained with the two instruments, and the figures of the Indian tribes and the Torres Straits Islanders differ from one another sufficiently to merit consideration.

---

[1] See Table XVIII of the Reports.

When the Urális and Sholagas adjusted the length of the line B C till it appeared to them to be equal to A B, the average result was that they made the former line 55·3 mm. in length; a line 55·3 mm. in length terminating in diverging lines appeared to them to be equal to one 75 mm in length, which was partially enclosed by lines. The Murray Islander made the line B C 61·1 mm. in length, and the English observers 55·6 mm. The Indian jungleman appears to resemble the Englishman rather than the Papuan.

This somewhat strange result is, I think, capable of explanation. I have shown elsewhere [1] that the illusion in question seems to be less marked to the Papuan than to the Englishman, and I have explained this result by supposing that the former attended more closely to the lines he was desired to make equal, and was less influenced by the appearance of the figure as a whole. I communicated directly with the Murray Islander in English which he understood well, and I pointed out to him carefully the lines he was to make equal, and in so doing directed his attention predominantly to those lines. In India I had to communicate with the people through interpreters, and I was continually noticing that the interpreters did not rigorously point out the lines I wished to be compared, but were often satisfied with roughly indicating the different parts of the figure. I always endeavoured to correct this, but it is most probable that the natives did not grasp so completely as the Murray Islanders the fact that they were to make the lines A B and B C equal, and I suspect that they were often trying to make the two parts of the figure similar to one another, and were not devoting their attention exclusively, or even predominantly, to the lines. If this suspicion be justified, it would explain why the member of a wild jungle tribe should resemble the European rather than the Papuan. It is because he is attending, like the European, to the figure as a whole, but doing so merely because the problem has not been put before him properly.

The mean variation of the results of the twenty-eight individuals from the average result (M.V.) is 3·52 as compared with 3·89 for Murray Island and 5·02 of English observers.

The illusion depending on erroneous estimation of a vertical as compared with a horizontal distance was measured by means of a piece of apparatus devised by Mr. Horace Darwin and myself.[2] The native under examination had

---

[1] See Reports, p. 126.

[2] Proc. Physiol. Soc., p. XI, Journ. of Physiol. XXVIII, 1902.

to adjust the length of a vertical white line on a background till it appeared to him to be equal in length to a horizontal line extending to the right from the bottom of the vertical line. As in the case of the Müller-Lyer illusion, five measurements were made by shortening the vertical line till it appeared equal to the horizontal, and five observations by lengthening the line, and the figures given in Table III are arranged on the same plan as those for the Müller-Lyer illusion, the figures in column A giving the averages of the whole ten observations made by each individual; those in column B the averages of the first five observations when the variable line was adjusted by making it shorter, and those in column C the averages when the variable line was lengthened.

The length of the constant horizontal line was 100 mm. and the numbers in columns A, B and C of Table III give the length in millimetres of the vertical line which seemed to the people to be equal in length to the constant horizontal line.

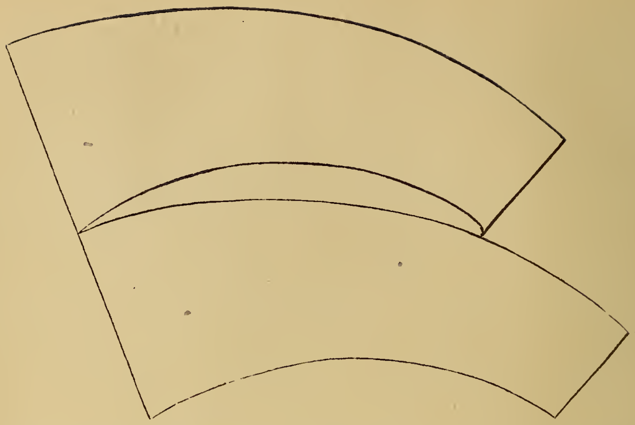
Table III.

Name.	A	B	M.V.	C	M.V.
Badra	91·7	96·6	2·48	86·8	2·32
Raman	96·4	96·4	4·72	96·4	3·92
asana	82·5	85·0	4·00	80·0	2·00
Badra	92·8	90·4	2·48	95·2	1·76
Nanjan	99·6	99·0	0·80	100·2	2·16
Dundun	85·8	88·0	2·40	83·6	2·08
Viran	98·6	98·4	0·96	98·8	6·16
Gope	93·6	92·6	2·08	94·6	3·68
Sodala	95·7	98·0	. 2·80	93·4	2·24
Bomma	94·1	92·0	1·60	96·2	4·64
Badra	100·4	102·4	2·88	98·4	3·12
Kethei	92·0	91·8	3·04	92·2	2·24
Kumba	90 2	95·2	6·24	85·2	1·04
Bomma	89·7	89·4	5·28	90·0	3·60
Average	93·1	93·9	2·98	92·2	2 93

The first ten people in this list are Urális, and the last four Sholagas. This test was not done as readily as that in which the Müller-Lyer illusion was measured. The reason for this was almost certainly the fact that the lines were adjusted by a more complicated mechanism. In the case of the Müller-Lyer illusion the subject has simply to slide one surface over another; in the illusion of compared horizontal and vertical lines, the threads forming the lines are adjusted in length by means of an arrangement at the back of the board, and out of the sight of the subject of the test. The native had, therefore, to do three things simultaneously; he had to hold the board upright in one hand, adjust the arrangement behind the board with the other hand, and attend to the result of this adjustment. The effort was altogether too much for some of the natives, while the attempts of those who succeeded were obviously not very satisfactory. Still here again the smallness of the mean variations seems to show that the results of the measurements were fairly constant. Two of the natives had very large variations, viz., Viran and Kumba, but I especially noted these men as doing the test well, so far as could be judged from observations of their behaviour and method of adjustment. The former made his first five measurements with very little variation, and then, on changing the direction of adjustment, seemed to find it very difficult to make a measurement. In his case I repeated the whole series, when he again did the first five measurements well, while making his second five abnormally long.

The tendency for the result to be influenced by the direction of adjustment of the lines was of the same kind as in the case of the Müller-Lyer illusion, but was less marked and much less constant. These were the first measurements made with this instrument, and I must content myself here with publishing the figures, and leave their comparison with those obtained in other races till another occasion.

Several other figures illustrating visual illusions were shown to some of the more intelligent (or less timid) natives, but in most cases it was impossible to decide whether the illusions were or were not present. There was no doubt, however, that several of the natives saw the apparent divergence or convergence of the lines in Zöllner's and allied figures. They also saw, and were much impressed by the following illusion shown in Fig. 6 of the Reports.



The results obtained in this examination of the Urális and Sholagas show a close agreement in general with those I have obtained elsewhere on other uncivilized races. The chief interest of these observations lies in the fact that they were made on people wilder than any I had previously examined.

W. H. R. RIVERS.

During a recent tour in the Mysore Province the visual acuity of 30 Bráhmans and 39 non-Brahmans belonging to various classes was tested with a letter E of the same size as that used by Dr. Rivers, with the following results :—

—	Age.			Distance in metres at which letter E was read.		
	Max.	Min.	Average.	Max.	Min.	Average.
Bráhmans ...	50	23	33·2	17	8	12·3
Non-Bráhmans.	50	19	33·4	16	7·5	12·2

The average distance at which the letter was read, it may be noted, coincides not only in the two sections of the community examined by myself, but with that recorded for the fifty-five Urális who were tested by Dr. Rivers.

E. T.

MORE MARRIAGE CUSTOMS IN SOUTHERN INDIA.

THE following note is intended to supplement the information relating to marriage customs, which is contained in Bulletin Vol. IV, No. 3.

I have there referred (p. 145) to the mock marriage with the arka plant (*Calotropis gigantea*), which is celebrated before a Bráhman marries a third wife. "The plant," Mr. A. Srinivasan writes,[1] "is named arka after the sun." When the car of the sun turns towards the north, every Hindu applies the leaves of this plant to his head before he bathes, in honour of the event. The plant is, besides, believed to be a willing scapegoat to others' ills. Oil and ghee (clarified butter) applied to the head of the victim of persistent illness has only to be transferred to this plant, when it withers and saves the man, even as Baber is said to have saved his son. The poet Kalidása describes sweet Sakuntala, born of a shaggy dweller of the forest, as a garland of jasmine thrown on an arka plant. "May the arka grow luxuriant in your house" is the commonest form of curse. "Be thou belaboured with arka leaves" is familiar in the mouths of reprimanding mothers. Adulterers were, half a century ago, seated on an ass, face towards the tail, and marched through the village. The public disgrace was enhanced by applying the despised arka leaves to their head. A Telugu proverb asks in triumph "Does the bee ever seek the arka flower"? The reasons for the ill-repute that this plant suffers from are not at all clear. The fact that it has a partiality for wastes has evidently brought on its devoted head the dismal associations of desolation, but there would seem to be more deep-seated hatred to the plant than has been explained. A Tamil proverb has it that "he earns merit who crushes the bud of the arka." Some Telugu and Kanarese Bráhmans, who follow the Yajur or Rig Véda, consider the arka plant as sacred, and use the leaves thereof during the nanthi (ancestor invoking) ceremony which is performed as one of

[1] 'Madras Christian College Magazine,' March 1903.

the marriage rites. Two or three arka leaves, with betel leaves and nuts, are tied to the cloth which is attached to a stick as representing the ancestors (pithrus). With some the arka leaves are replaced by leaves of *Pongamia glabra.* Bráhmans who follow the Sáma Véda, during the annual upákarmam ceremony, make use of arka leaves and flowers in worshipping the Rishis and pithrus. On the upákarmam day the Sáma-Védis invoke their sixty-two Rishis and the last three ancestors, who are represented by sixty-five clay balls placed on arka leaves. To them are offered arka flowers, fruits of karai-chedi (*Canthium parviflorum*) and naval (*Eugenia Jambolana*). In addition to this worship, they perform the Rishi and pithru tharpanam by offering water, gingelly (*Sesamum indicum*) seeds, and rice. The celebrant, prior to dipping his hand into the water, places in his hands two arka leaves, gingelly and rice.[1] The juice of the arka plant is a favourite agent in the hands of suicides.

I have already referred to the custom among the Dandásis (village watchmen) of Ganjám of a bachelor who wishes to marry a widow having first to marry a saháda or shádi tree, called in Telugu bharinike chettu. This tree is apparently *Streblus asper,* the twigs of which are stuck in and around thatched roofs of houses to ward off lightning. I am informed that this form of marriage obtains among other Oriya classes, including Bráhmans, and that a widower who wishes to remarry must first go through the ceremonial of marriage with this plant. Among the Dhobis of Mysore pre-puberty marriage is the rule, but puberty is no bar. The girl must, however, be first married to a tree or a sword before being married to the bridegroom.[2]

The Rázus (Telugu agriculturists), who are settled in Tinnevelly, claim to be Kshatriyas. Some of their women are gosha. Men may not shave the face, and wear a beard until their marriage. Nor are they, so long as they remain bachelors, invested with the sacred thread. At the marriage the bridegroom goes through the birth, naming, tonsure, and thread investiture ceremonies on the táli-tying day. These ceremonies are performed as with Bráhmans except that, in lieu of passages from the Védas, slokas specially prepared for the classes below the Bráhmans are chanted.

---

[1] K. Rangachari, MS.
[2] 'Mysore Census Report,' 1901.

RÁZU BRIDEGROOM.

When the bride is with the bridegroom on the dais, a wide-meshed green curtain is thrown over her shoulders, and her hands are pressed over her eyes, and held there by one of her brothers, so that she cannot see. Generally two brothers sit by her side, and, when one is tired, the other relieves him. At the moment when the táli is tied, the bride's hands are removed from her face, and she is permitted to see her husband. On the third day the bride is brought to the marriage booth in a closed palanquin, and she is once more blindfolded while an elaborate ceremonial with pots is gone through.

The marriage ceremonies of the Kávarais (Tamil synonym for Balija) who are settled in Tinnevelly are like those of many other Telugu castes, and the interposition of a screen between the bride and bridegroom, and tying of the second táli or string of black beads on the nágavali day are performed. But those who belong to the símaneli sept go through two additional ceremonies. One of these, called Krishnamma perantálu, is performed on the day previous to the tying of the táli. It consists in the worship of the soul of Krishnamma, a married woman. A new cloth is purchased, and presented, together with money, betel, etc., to a married woman, who eats before those who are assembled. All the formalities of the srâddha ceremony are observed, except the burning of the sacred fire (homam) and repeating of mantras from the Védas. This ceremony is very commonly observed by Bráhmans, and castes which employ Bráhman priests for their ceremonials. The main idea is the propitiation of the soul of the deceased married woman. If in a family a married woman dies, every ceremony of an auspicious nature should be preceded by the worship of the Sumangali (married woman), which is known as Sumangali-prarthana. Orthodox women think that, if the soul of Sumangali is not thus worshipped, she may do some injury to those who are performing the ceremony. On the táli-tying day the Kávarai bride and bridegroom proceed to the temple, to worship. A few small pots are placed on the turban of the bridegroom, and on the head of the bride, where they are kept in position by the kongu or free end of her cloth. The sacred thread is worn during the marriage ceremony, but not afterwards.

The Ilaiyáttakudi section of the Chettis (merchants) has seven exogamous subdivisions, called kóvils or temples, which derive their names from seven favourite temples.

Ilaiyáttakudi is considered the parent temple, and, when a man of any of the other six kóvils is married, he has to obtain two garlands of flowers, one from the temple at that place, and one from the temple after which his subdivision is named.[1]

The Kondayamkottai Maravars, Mr. F. Fawcett tells us [2] are divided into six sub-tribes or trees. Each tree or kothu (branch) is divided into three khilais or branches. Those of the khilais belonging to the same tree or kothu are never allowed to intermarry. "A man or woman must marry with one of a khilai belonging to another tree than his own, his or her own being that of his or her mother, and not of the father. But marriage is not permissible between those of any two trees or kothus. There are some restrictions. For instance, a branch of betel vine or leaves may marry with a branch of cocoanut, but not with areca nuts or dates."

As regards marriage among the Khonds, a correspondent informs me that he once saw a bride going to her new home, riding on her uncle's shoulders, and wrapped in a red blanket. She was followed by a bevy of girls and relations, and preceded by drums and horns. He was told that the uncle had to carry her the whole way, and that, if he had to put her down, a fine in the shape of a buffalo was inflicted, the animal being killed and eaten on the spot. It is recorded that a European magistrate once mistook a Khond marriage for a riot, but, on enquiry, discovered his mistake.

A Pariah bride, at Coimbatore, is carried in the arms of her maternal uncle thrice round the wedding booth. At the same place, after the táli has been tied round the Odde (navvy) bride's neck, her maternal uncle ties a four-anna piece in her cloth, and carries her in his arms to the marriage booth. The Idaiyan (shepherd) bridegroom makes a present of four annas and betel to each of the bride's maternal uncles' sons, who have a natural right to marry her. The acceptance of the presents indicates their consent to the marriage. One of the bride's maternal uncles carries her in his arms to the marriage booth, while another uncle carries a lighted torch on a mortar. The light is placed in front of the contracting couple, who are seated side by side. The bride and bridegroom's wrists are tied together

---

[1] 'Madras Census Report,' 1901.
[2] Man., Vol. XXXIII, 1903.

by the maternal uncles' sons. When they retire to the bride's house, she is carried in the arms of the elder brother of the bridegroom. They are stopped by the maternal uncles' sons, who may beat the man who is carrying the bride. But, on payment by the bridegroom of four annas to each of his cousins, he and his bride are permitted to enter the house.

Among the Yerukalas, (nomad tribe) polygamy is practised, and the number of wives is only limited by the means of the husband. Marriage of relations within the degree of first cousins is not allowed. The rule is relaxed with respect to a man marrying the daughter of his father's sister, which is not only allowed, but a custom prevails that the two first daughters of a family may be claimed by the maternal uncle as wives for his sons.[1] It may be noted that the Gujaráti equivalent for "Half a loaf is better than no bread" is "He that hath no other uncle must put up with a squinting uncle." It is the duty of the maternal uncle in Gujarat to conduct the bridegroom to the place appointed for the marriage ceremony.[2] I have previously [3] stated that "the Yerukalas of the Kistna district are divided into two classes—sheep and goats practically. Of these, the latter are the bastard offspring of the former. They are not allowed to marry among the legitimate members. But, in order to prevent their becoming a separate caste, the sons and daughters of a bastard couple are not allowed to marry a bastard. They must marry a legitimate, and so the second generation is clean again." The Collector of the district informs me that legitimate may not marry illegitimate. Illegitimate must marry illegitimate. The offspring thereof is *ex-officio* whitewashed and becomes legitimate, and must marry a legitimate. Writing concerning marriage among the Yerukalas, Dr. Shortt states [4] that "a custom prevails by which the first two daughters of a family may be claimed by the maternal uncle as wives for his sons. The value of a wife is fixed at twenty pagodas. The maternal uncle's right to the first two daughters is valued at eight out of twenty pagodas, and is carried out thus. If he urges his preferential claim, and marries his own sons to his nieces, he pays for each only twelve

---

[1] 'Manual of the Nellore District.'
[2] M. Macmillan. 'The Globe Trotter in India,' 1895.
[3] Bulletin, Vol. IV, No. 3, p. 154.
[4] 'Trans. Ethn. Soc. N.S.' Vol. VII, p. 187.

pagodas; and similarly if he, from not having sons or any other cause, foregoes his claim, he receives eight pagodas out of the twenty paid to the girl's parents by anybody else who may marry them."

At an Idigar (toddy-drawer) wedding the maternal uncle of the bride bathes, and, going to the place where kalli (Euphorbia) bushes are growing, performs púja to the plant, and cuts a twig with five sub-branches, which is taken to the temple and worshipped. On the wedding day the brother of the bride is fantastically dressed, with margosa (*Melia Azadirachta*) leaves tied to his turban, and carries a bow and arrow. This kodangi (buffoon) is conducted in procession to the temple by a few married women, and made to walk on cloths spread in front of him by the village washerman. On reaching the temple, he and the women worship a vessel placed in a tray along with betel leaves, plantain fruits, and a mirror. The boy, while thus worshipping, is surrounded by a screen, and at the conclusion of the ceremony, goes three times round the vessel and screen. At the close of each revolution, three plantains and sweet cakes are stuck on to the arrow which he carries.

A Coorg bridegroom, mounted on a pony, dismounts at the gate of the bride's residence, which he approaches bare-footed, and advances like a traveller of old on a long journey, with an alpine staff in his hand. When he has advanced within the gate, men hold upright the stems of a plantain tree with the leaves on them. The large broad Coorg war-knife is given into his hand, and he has to cut through a plantain stem with one blow. Three chances are allowed him. It is clear that the possession of physical strength has always been regarded by this race as an essential requisite in a suitor, and the survival of this custom is a safeguard against the premature marriage of children, which prevails elsewhere. The shooting of a tiger is a glorious event in a Coorg man's life. The hero goes through a formal ceremony of marriage with the dead monster.[1] At the Mattupongal festival "towards evening festoons of aloe fibre and cloths containing coins are tied to the horns of bullocks and cows, and the animals are driven through the streets with tom-tom and music. In the villages, especially those inhabited by the Kallans in Madura

---

[1] T. C. Rice. 'Malabar Quart. Review,' Dec. 1902.

and Tinnevelly, the maiden chooses as her husband him who has safely untied and brought to her the cloth tied to the horn of the fiercest bull. The animals are let loose, with their horns containing valuables, amidst the din of tom-tom and harsh music, which terrifies and bewilders them. They run madly about, and are purposely excited by the crowd. A young Kalla will declare that he will run after such and such a bull—and this is sometimes a risky pursuit—and recover the valuables tied to its horn. The Kalla considers it a great disgrace to be injured while chasing the bull.[1]"

In the marriage ceremony of the Toreyas (Canarese fishermen) of Coimbatore, the bridegroom's sister meets the newly-married couple as they approach the bride's home, and prevents them from proceeding till she has extracted a promise from them that their child shall marry her child. At an Odde wedding, at the same place, when the bridegroom and his party try to enter the bride's house, they are met on the threshold by some of the relatives of the bride, who ask them to sing at least one song before going in.

Among the Kaikólan (weaver caste) musicians of Coimbatore, at least one girl in every family should be set apart for the temple service, and she is instructed in music and dancing. At the táli-tying ceremony she is decorated with jewels, and made to stand on a heap of paddy (unhusked rice). A folded cloth is held before her by two Dásis (dancing girls), who also stand on heaps of paddy. The girl catches hold of the cloth, and her dancing master, who is seated behind her, grasping her legs, moves them up and down in time with the music which is played In the evening she is taken, seated astride a pony, to the temple, where a new cloth for the idol the táli, and other articles required for doing púja have been got ready. The girl is seated facing the idol, and the officiating Bráhman gives sandal and flowers to her, and ties the táli, which has been lying at the feet of the idol, round her neck. The táli consists of a golden disc and black beads. She continues to learn music and dancing, and the *ars amoris*, and eventually goes through the form of a nuptial ceremony. The relations are invited for an auspicious day, and the maternal uncle, or his representative, ties a golden band on the girl's forehead, and, carrying her, places her on a plank before the assembled guests. A Bráhman priest recites

---

[1] S. M. Natesa Sastri. 'Hindu Feasts, Fasts, and Ceremonies,' 1903.

mantrams, and prepares the sacred fire (homam). For the actual nuptials a rich Bráhman if possible, and, if not, a Bráhman of more lowly status is invited. A Bráhman is called in as he is next in importance to, and the representative of the idol. As a Dási can never become a widow, the beads in her táli are considered to bring good luck to women who wear them. And some people send the táli required for a marriage to a Dási, who prepares the string for it, and attaches to it black beads from her own táli.

The Jakkulas are, in the Census report, 1901, returned as an inferior class of prostitutes, mostly of the Balija caste. In Tenali, Kistna district, it was customary for each Jakkula family to give up one girl for prostitution. She was "married" to any chance comer for one night with the usual ceremonies. Under the influence of social reform, the members of the caste entered into a written agreement to give up the practice. A family went back on this, so the head of the caste prosecuted them and the "husband" for disposing of a minor for the purpose of prostitution.

Concerning the ceremony of dedication of a girl as a Basivi (dedicated prostitute) in the Bellary district, Mr. F. Fawcett writes as follows.[1] "A táli, on which is depicted the iraman of Vishnu, fastened to a necklace of black beads, is tied round her neck. She is given, by way of insignia, a cane as a wand, carried in the right-hand, and a gopálam or begging basket, which is slung on the left arm." She is then branded with the emblems of the chank and chakra.

Among the Kávarais of Tinnevelly, a custom, which is now dying out, was the wearing by the bridegroom of a dagger called jintadu at the waist. The Vakkaligas of Mysore use a katar or vanki (dagger) during the marriage ceremony. The best man usually carries it in his hand. The bridegroom's sister carries a pot of rice, into which a four-anna piece has been dropped. When the bridegroom goes to the temple, prior to the tying of the táli, he is accompanied by these articles. The dagger, which has a red cloth tied round the blade, must be close to the bridegroom when he comes to the marriage booth. On the third day, when he goes to his father-in-law's house, the dagger must go with him, and is then returned to its owner. Just before the táli is tied, a screen is stretched between the bridal couple, over whom jaggery (molasses) and cummin seeds

---

[1] 'Journ. Anth. Soc., Bombay,' 1891.

VAKKALIGA BRIDE.

are thrown. The screen is then removed, and the táli and silver bracelets are placed in the bridegroom's hands. The bride places her hands beneath his, and the relations pour milk over the táli. The táli and bracelets are then placed in the bride's hands, and the bridegroom sets his hands beneath hers. The milk-pouring is repeated. The táli is placed on a piece of jaggery, and passed round to be blessed. It is then tied on the bride's neck by the bridegroom.

At a marriage among the Okkiliyans (cultivators) of Coimbatore, the bridegroom carries a katar (dagger) with a lime stuck on the point, wrapped up in a cloth, which he keeps by him until the kanganam (wrist thread) is untied. An Odde bridegroom, when he proceeds to the bride's house, carries a curved knife partly concealed by a cloth. When the táli is tied round the bride's neck, she stoops down, and the bridegroom touches the knot of the táli string thrice with the knife, implying thereby that the knot has been so firmly tied that even a knife cannot cut it. Hence their union will also be strong. At a Toreya marriage, the Bráhman priest ties on the head of both bridegroom an ornament made of gold leaf or tinsel, called mandai-kattu. The bridegroom puts on the sacred thread, and, holding a katar (dagger) in his hand, sits in the wedding booth with a cloth screen surrounding him on all sides. The tying of a bashingam, made of pith or flowers, on the forehead (Pl. II.) during the marriage ceremony is a general custom among the Telugu and Kanarese classes.

Concerning the marriage ceremony of the Tottiyans or Kambalas (Telugu cultivators) of Madura and Tinnevelly: I gather that it is carried out in two temporary huts, one for the bridegroom, the other for the bride. The táli is tied round the bride's neck by an elderly male or female belonging to the family. If the marriage is contracted with a woman of a lower class, the bridegroom's hut is not made use of, and he does not personally take part in the ceremony. A dagger (katar), or rude sword is sent to represent him, and the táli is tied in the presence thereof. In a Zamindári suit some years ago, details of which are published in the Madras Law Reports, Vol. XVII, 1894, the Judge found that "the plaintiff's mother was married to the plaintiff's father in the dagger form; that a dagger is used by the Saptúr Zamindars, who are called Kattari Kamaya, in the case of inequality in the caste or social position of the bride; that, though the customary rites of

the Kumbla caste were also performed, yet the use of the dagger was an essential addition ; and that, though she was of a different and inferior caste to that of the plaintiff's father, yet that did not invalidate the marriage. The defendant's argument was that the dagger was used to represent the Zamindar bridegroom as he did not attend in person, and that, by his non-attendance, there could have been no joining of hands or other essential for constituting a valid marriage. The plaintiff argued that the nuptial rites were duly performed, the Zamindar being present ; that the dagger was there merely as an ornament, and that it was customary for people of the Zamindar's caste to have a dagger paraded on the occasion of marriages. The Judge found that the dagger was there for the purpose of indicating that the two ladies, whom the Zamindar married, were of an inferior caste and rank.

I am informed that, among all the Oriya castes, except Bráhmans, which follow the rule of infant marriage, a girl is married to an arrow, if a suitable husband has not been found for her before she reaches puberty. The actual marriage may take place at any time afterwards.

At a marriage among the Mal Vellálas a live fowl is swung by the head-man round the heads of the bride and bridegroom. Its neck is then wrung, and the dead bird thrown to the attendant clarionet-player. In front of the bridegroom are placed a series of bamboo pans, each containing palmyra jaggery (molasses), cocoanuts, plantains, betel nuts, and four-anna pieces. In one pan are new cloths for the contracting couple, and in the other a spear.

The custom of the bridal couple bathing in water brought from seven different villages, which I have previously referred to as occurring among the Dhobis (washermen), obtains among many Oriya castes, including Bráhmans. It is known by the name of páni-tula. The water is brought by married girls who have not reached puberty on the night preceding the wedding day, and the bride and bridegroom are washed in it before dawn. This bath is called koili-páni-snáno or cuckoo water bath. The koil is the Indian koel or cuckoo (*Eudynamis honorata*) whose crescendo cry of ku-il, ku-il is trying to the nerves in the hot weather.

On the occasion of a marriage among the Oddes of Coimbatore, three female relations of the bridegroom proceed to a white-ant hill, and, after worshipping it by

breaking cocoanuts and burning camphor, fill three baskets with earth from the hill, and carry them to the marriage booth. They then bring from the potter's house three decorated pots and an earthen tray, and place them in the booth. A bit of turmeric with betel leaves is tied to each pot, and they are filled with water. In front of the booth a small platform is made with the ant-earth mixed with water. A wild sugar-cane, twig of *Ficus religiosa*, and of the milk-hedge (*Euphorbia*) are tied together, and planted in the centre of the platform.

At a marriage among the Pallans (agricultural labourers) of Coimbatore, cocoanuts are broken, and offered to a Pillayar (figure of Ganésa) made of cow-dung. The táli is taken round in one of the fragments, to be blessed by those assembled. When a marriage is contemplated among the Idaiyans of the same place, the parents of the prospective bride and bridegroom go to the temple, and throw before the idol a red flower and a white flower, each wrapped in a betel-leaf. A small child is then asked to pick up one of the leaves. If the one selected contains the white flower, it is considered auspicious, and the marriage will be contracted. During the marriage ceremony the officiating Bráhman places a cow-dung Pillayar in the marriage booth. The bride husks some paddy. The relations of the bride and bridegroom fetch from the potter's house seven pots called adukupanai (pots kept one over the other), two large pots called arasanipanai, and seven earthen trays, and place them in front of the mud platform. The pots are filled with water, and a small piece of gold is dropped into each. The pots are worshipped daily during the marriage ceremony.

On the wedding day, among the Iluvans, (toddy-drawers) of Malabar, the bridegroom's face is shaved, and, after being rubbed with oil, he is bathed by seven young men. He is carried, or walks on planks from the bathing-place to the marriage booth, and must not touch the ground with his feet. The barber cuts the nails of an Okkiliyan bride and bridegroom. The barber also, after doing some púja, shaves the face of an Idaiyan bridegroom, and receives as his fee four annas, some rice, and the cloth which the young man was wearing. An Odde may not shave his face till it has been shaved by the barber on his wedding day.

It is the barber, at a marriage among the Konga Vellálas of the Salem district, who officiates at the marriage rites, and

ties the táli. Bráhmans are invited to the wedding, and treated with due respect, and presented with money, rice, betel leaves and nuts. The barber, when he ties the táli, mutters something about Bráhman and Védas in a respectful manner. The story goes that, during the days of the Chéra, Chola, and Pandyan Kings, a Bráhman and an Ambattan (barber) were both invited to a marriage feast. But the Bráhman, on his arrival, died, and the folk, believing his death to be an evil omen, ruled that the Bráhman being missing, they would have the Ambattan; and it has ever since been the custom for the Ambattan to officiate at weddings.[1] The purohits (priests) of the Kallan Muppans of Malabar are Tamil barbers, who officiate at their marriages. The barber shaves the bridegroom before the marriage ceremony, and the purohit has to blow the conch shell all the way from the bridegroom's house to that of the bride.[2]

The milk-post, at a wedding among the Okkiliyans of Coimbatore, is made of the milk-hedge (*Euphorbia Tirucalli*), to which mango leaves and a kanganam (wrist thread) are tied. To the marriage post of the weaver Kaikólans a cloth dipped in turmeric, in which pearls, coral, pieces of gold, and nine kinds of grain are tied up, is fixed. A four-anna piece, wrapped in a cloth, is tied to the milk-post of the Oddes.

At a marriage among the Paraiyans (Pariahs) of Coimbatore, the little finger of the bridegroom's right hand is linked with the little finger of the bride's left hand, the two hands being covered with a cloth. The ends of the cloths of an Okkiliyan bridegroom and bride, with betel leaves and nuts in them, are tied together, and the little fingers of their right hands are linked together.

The mother of a Paraiyan bride, at Coimbatore, places seven rice cakes on the bridegroom's body, viz., on the head, above the shoulders, in the bend of the elbows, and in each hand. She removes all except the one on the head, and re-places them three times, when the cake on the head is removed with the others. A similar ceremony is performed on the bride.

The Toreyan bridegroom places his hands together, and small rice cakes are placed on his body in the following

---

[1] C. Hayavadana Rao.

[2] C. Karunakara Menon.

PL. III.

GÁNIGA BRIDAL COUPLE.

positions: one on the head, two above the shoulders, two in the bends of the elbows, two in the knees, and four between the fingers. Cakes are, in like manner, placed on the bride's body. At a Toreya wedding cooked rice, white and coloured red, yellow, black, and green, is placed in trays, and waved before the contracting couple. Then nine lighted wicks are placed in a tray, and waved to avert the evil eye. Marriage, among the Toreyans, is always celebrated at the house of the bridegroom, never at that of the bride, as there is a legend that there was once a Rajah belonging to this caste, whose son was taken to the house of his bride-elect, and there murdered.

At an Idaiyan wedding, at Coimbatore, the bridegroom places his right foot, and the bride her left foot on a grindstone, and they look at the star Arundati in the great Bear, which represents the wife of the ascetic Vashista, who is the pattern of chastity. The grindstone represents Ahalliya, who was the wife of a saint, Gauthama. She was cursed by her husband for her misconduct with Indra, and became turned into a stone. By placing their feet on the grindstone, the young couple express a wish to keep in check unchaste desires. The bride decorates a small grindstone with cloths and ornaments, gives it to the bridegroom, and takes it to all the assembled relations, who give her something, and bless her with a hope that she will bring forth many children.

During the wedding ceremony among the Paraiyans of Coimbatore, a pestle is placed in the marriage booth, and the bridegroom sits on it. The bride's father and brothers rub oil over his head, and he is bathed. The bride then sits on the pestle, and is in like manner anointed with oil and bathed. The pestle is then removed, and a plank placed in its stead. A four-anna piece, and a small chank shell (*Turbinella rapa*) such as is used as a baby's pap-bowl, are thrown into a pot containing turmeric water, from which the bride is expected to pick up the shell, and the bridegroom the coin. This is repeated three times, and the kanganams (wrist threads) are then untied, and put into the pot. When an Odde bride and bridegroom enter the bride's house, a pot of water is brought, and they put their hands into it. A ring is dropped into the pot, and they both try to pick it up. Whoever first does so is considered to be the more clever. This is repeated three times. At an Idaiyan wedding, a gold and silver ring are placed in a large pot, and in another pot a style, such as is used for

writing on palm leaves, and a piece of palm leaf are placed. The bride and bridegroom then struggle to catch hold of these objects.

At a marriage among the Iluvans of Malabar, the bridegroom removes seven threads from the new cloth brought for the bride, and makes a string with them, which is coloured yellow with turmeric. To the string he attaches the táli, which he places on betel leaves, and hands over to his sister. During the ceremony the bride stands on rice, and covers her face with betel leaves. To bring good luck to the young couple, a married woman with a child meets them as they approach the bridegroom's house.

During the marriage ceremony among the Oddes of Coimbatore, a woman, belonging to a Pedda (big) Boyan family, puts turmeric water mixed with chunam (burnt lime), betel leaves, and a coral necklet in a vessel, and waves it in front of the bridegroom's face. This is alathi, and is done to avert the evil eye. At the close of the ceremony the bride and bridegroom tie the ends of a single cloth round their bodies, and are bathed in turmeric water, which they pour over each other. They then look at the sky, and, taking water in both hands, throw it down thrice. The kanganams are then untied.

A Kádir (jungle man of the Cochin hills), who intends to marry, goes out of his own village, and lives in another for a whole year, during which period he makes his choice of a wife. At the end of the year he returns to his own village, and obtains permission from the villagers to effect the contemplated union. Then he goes away again to the village of his bride-elect, and gives her a dowry by working there for another year. He then makes presents of cloths and iron tools to the girl's mother, after which follows a feast, which completes the ceremony.

At a wedding among the Lingayats, in the case of a four-day marriage, the first day is spent in worshipping ancestors. On the second day, rice and oil are sent to the local mutt, and oil alone to the relatives. New pots are brought with much shouting, and deposited in the god's room. A booth is erected, and the bridegroom sits under it side by side with a married female relative, and goes through a performance called surige. An enclosure is made round them with cotton thread passed ten times round four earthen pitchers placed at the four corners. Five married women come with

boiled water, and wash off the oil and turmeric, with which the bride and bridegroom and his companion have been anointed. The matrons then clothe them with the new cloths offered to the ancestors on the first day. After some ceremonial, the thread forming the enclosure is removed and given to a Jangam (priest). The surige being now over, the bridegroom and his relative are taken back to the god's room. The bride and one of her relations are now taken to the booth, and another surige is gone through. When this is over, the bride is taken to her room, and decorated with flowers. At the same time the bridegroom is decorated in the god's room, and, mounting on a bullock, goes to the village temple, where he offers a cocoanut. A chaplet of flowers (bashingam) is tied to his forehead, and he returns to the house. In the god's room a pánchakalásam, consisting of five metal vessels, with betel and vibhúti (sacred ashes) has been arranged, one vessel being placed at each corner of a square, and one in the middle. By each kalásam is a cocoanut, a date-fruit, a betel leaf and arecanut, and one pice (copper coin) tied in a handkerchief. A cotton thread is passed round the square, and round the centre kalásam another thread, one end of which is held by the family guru (priest), and the other by the bridegroom, who sits opposite to him. The guru wears a ring made of kusa grass on the big toe of his right foot. The bride sits on the left of the bridegroom, and the guru ties their right and left hands together with kusa grass. The joined hands are washed, and bilva (*Ægle Marmelos*) and flowers are offered. The officiating priest then consecrates the táli and the kanganam; ties the latter on the wrist of the joined hands; and gives the táli to the bridegroom, who ties it round the bride's neck, repeating some words after the priest. On the fourth day the married couple worship Jangams and the elders, and take off the kanganam (consecrated thread) from their wrists, and tie it to the doorway.[1]

At a wedding among the Muhammadan Mappilas (or Moplahs) of Malabar, the bridegroom and his suite are conducted to a room in the bride's house specially prepared for their reception. After a few minutes' stay in the room, the party withdraws, leaving the bridegroom alone. The bride is next introduced into the room by her female relations, and the door is closed by them. The bridegroom and the bride are left together for a few minutes. The bride

[1] 'Madras Museum Bull.' MS.

then leaves, and the bridegroom's party enters, and take him back to his house. In some places the bride and bridegroom are permitted to spend the whole night together, and the latter takes leave only the next morning. In some of the southern tâluks (divisions) the custom is the reverse of what has just been described. The bride is first conducted into the room, and persuaded or forced to lie on a sofa, and the bridegroom is next introduced into it, tarries there a few moments, and then leaves. This is practicable only in the case of girls of tender age, who are ignorant of the meaning of what they are made to do.[1]

Among many of the classes which inhabit the plains of Ganjam—Loharas, Tiyóros, Benias, Aruvas, etc.—the younger brother has a claim to marry the widow of an elder brother.

Of marriage among the Arayans (fishing caste) of Travancore the Rev. A. W. Painter writes as follows[2]:—"A curious ceremony prevails, copied, I believe, from the custom of Nairs and Chogans, though differing in several particulars. As soon as the woman attains maturity, relatives and friends are summoned to a feast. The pooshári (priest) having fixed the propitious hour, the girl is brought in, and made to stand on a plank of jack-wood (*Artocarpus integrifolia*), a tree considered sacred by the Arayans. The father's sister then ties the táli around her neck. The feast is then partaken of, and the ceremony is considered complete."

At a wedding among the Mal Arayans the bridegroom and bride sit and eat from the same plantain leaf, after which the táli is tied. The bride then seizes any ornament or cooking vessel in the house, saying that it is her father's. The bridegroom snatches it from her, and the marriage rite is concluded.[3]

The father of a would-be bridegroom among the Malaiális of the Yelagiri hills, Salem district, when he hears of the existence of a suitable bride, repairs to her village with some of his relations, and seeks out the Úr-Goundan or headman, between whom and the visitors mutual embraces are exchanged. The object of the visit is explained, and the father says that he will abide by the "voice of four" in the

---

[1] P. Kunjain. 'Malabar Quart. Review,' Vol. II, No. 1, 1903.
[2] 'Journ. Anthrop. Soc., Bombay,' Vol. II.
[3] 'Travancore Census Report,' 1901.

matter. If the match is fixed up, he gives a feast in honour of the event. When the visitors enter the future bride's house, the eldest daughter-in-law of the house appears on the threshold, and takes charge of the walking-stick of each person who goes in. She then, with some specially prepared sandal paste, makes a circular mark on the foreheads of the guests, and retires. The feast then takes place, and, before the party retire, the daughter-in-law again appears, and returns the walking sticks. It is said that, even if the number thereof is more than fifty, she, like an American lift-boy who remembers the number of all the lodgers in a hotel, always hands over the sticks to their owners.[1]

Concerning the Kammálans (artisans) of Malabar Mr. S. Appadorai Iyer writes that as with the Nayárs, the táli-kettu kalyánam has to be celebrated. For this the parents of the child have to find a suitable manaválan or bridegroom by the consultation of horoscopes. An auspicious day is fixed, and new cloths are given to the manaválan. The girl bathes, and puts on new clothes. The bride and bridegroom are brought to the marriage booth, where the táli-tying ceremony takes place. This concluded, the bridegroom takes a thread from the new cloth, and breaks it in two, saying that his union with the girl has ceased. He then walks away without looking back.

With the Iluvans of Malabar the veetil kettu corresponds to the táli-kettu ceremony of other castes. The girl is bathed by seven maidens, and made to stand on a plank. The boy's sister then ties the táli round her neck. The maidens husk a measure of paddy, and they and the girl eat it. On the fourth day the girl is taken to a tank, and bathed. Flowers and three lighted wicks are placed on a raft made of a plantain stem, and floated on the water while she bathes. On her return from the tank, she is given a little jaggery and cocoanut to eat. The girl's father asks the boy's people that the marriage tie should be severed. Her mother, or one of her female relations, takes a thread from her cloth, and, saying that the girl and boy are separated, puts it in a vessel containing cooked rice. This vessel, and two other vessels containing curry and other food-stuffs, are sent to the boy's house. The girl is no longer his wife, and may be married to any one else. If a girl is to be married before the veetil kettu has been performed, the sister of the

---

[1] C. Hayavadana Rao. MS.

bridegroom-elect carries a new cloth as a present from him to the bride's house. Instead of the táli, a gold ring is tied on the girl's neck. The remaining ceremonies are as at any ordinary wedding. This form of marriage is called kannannee.

It is stated in a recent article [1] that among the Konars (cowherds) of Poondurai near Erode, in the Tamil country, who, according to tradition, originally belonged to the same tribe as the Gopas living in the southern part of Kerala and now forming a section of Nayars, the former matrimonial customs were exactly the same as those of the Nayars. They, too, celebrated kettukaliánam, and, like the Nayars, did not make it binding on the bride and bridegroom of the ceremony to live as husband and wife. They have now, however, abandoned the custom, and have made the tying of the táli the actual marriage ceremony.

As bearing on the subject of polyandry among the Nayars, I may quote the following passage from Ellis' Kural:—"On the continent of India polyandry is still said to be practised in Orissa, and among particular tribes in other parts. In Malayálam, as is well known, the vision of Plato in his ideal republic is more completely realised. The women among the Náyars not being restricted to family or number, but, after she has been consecrated by the usual rites before the nuptial fire, in which ceremony any indifferent person may officiate as the representative of her husband, being in her intercourse with the other sex only restrained by her inclinations; provided that the male with whom she associates be of an equal or superior tribe. But it must be stated, for the glory of the female character, that, notwithstanding the latitude thus given to the Náyattis, and that they are thus left to the guidance of their own free will and the play of their own fancy (which in other countries has not always been found the most efficient check on the conduct of either sex), it rarely happens that they cohabit with more than one person at the same time. Whenever the existing connexion is broken, whether from incompatibility of temper, disgust, caprice, or any of the thousand vexations by which, from the frailty of nature, domestic happiness is liable to be disturbed, the woman seeks another lover, the man another mistress. But it mostly happens that the bond of joint paternity is here, as elsewhere, too strong to be shaken off;

---

[1] K. Kannan Nayar. 'Malabar Quart. Review,' 1903.

and that the uninfluenced and uninterested union of love, when formed in youth, continues even in the decline of age." Of the paternal form of polyandry (adelphogamy) in Malabar, Bartolomeo writes [1] that "on the coast of Malabar a custom prevails, in the cast to which the braziers belong, that the eldest brother alone marries; but the rest, when he is absent, supply his place with their sister-in-law."

A form of marriage, known as the Sarvaswadanam marriage, is still in force among the Nambudri Bráhmans, the formula used during the marriage being the following text from Vashista :— "I give unto the this virgin (who has no brother) decked with ornaments, and the son who may be born of her shall be my son." This form of marriage is not recognised in the Mitakshara, which in such matters governs almost the whole of India at the present day. Similarly, the adoption of a son in the Dwayamushayana form, *i.e.*, as the son of two fathers (the natural and adoptive) is the ordinary form of adoption recognised in Malabar, while in countries governed by the Mitakshara law it is considered as obsolete.[2]

EDGAR THURSTON.

---

[1] 'Voyage to the East Indies,' 1776–89.

[2] Mr. Justice K. Narayana Marar. 'Malabar Quart. Review,' Vol. I, 1902.

HOOK-SWINGING.

In summing up a series of reports on the swinging festival, the Government of Madras, in 1854, expressed the opinion that it "is on the whole less frequently observed now than formerly. In some few districts the practice is as prevalent as ever; in the majority, however, it is on the decline, while in none can it be called general. Further it does not seem to be in any way connected with the religion of the observers, but to be performed in fulfilment of vows. In some cases it would appear that the observance has led to loss of life. This would, of course, justify the interference of the magistracy, and, in future, any occurrence of this nature should lead to the prohibition of the ceremony at the village where it happened. The best method of discouraging this objectionable practice must be left to the discretion of the different magistrates, but the Governor in council feels confident that, if it be properly explained that the object of Government is not to interfere with any religious observance of its subjects, but to abolish a cruel and revolting practice, the efforts of the magistracy will be willingly seconded by the influence of the great mass of the community, and more particularly of the wealthy and intelligent classes who do not seem to countenance or support the swinging ceremony."

From the Government records (1854) the following details are culled[1]:—

In 1852 two men were killed during the celebration of the festival in the Salem district, in consequence of the pole from which they were suspended having accidentally snapped. In the Tanjore district the festival was known to have been practised in former years in a hundred and twenty-five towns and villages, and still took place occasionally in seventy-eight places. In the Nellore district swinging festival of the following natures were observed either annually or at intervals of two to thirty years:—

1. Gaulaupooseedy, *i.e.*, a man hung to the end of a cross beam fixed on a post by the skin, etc., of his back with iron hooks.

---

[1] Reports on the swinging festival and the ceremony of walking through fire, 1854.

HUMAN HOOK-SWINGING.

2. Gumpaseedy, *i.e.*, a man sitting in a basket or on a plank hung to the end of the iron-beam thereof.

3. Pucaseedy, *i.e.*, iron hooks fixed in the sides of a man who has to walk round a pagoda.

4. Tallaseedy, *i.e.*, a man hung to a post by a rope tied to his waist.

In the Kistna district there had been no swinging for several years, but the custom was reintroduced by an old pensioned Hindu Subadar. It appeared that his father's sister performed suttee 70 or 80 years since, and a temple was erected to her memory on the site of her immolation, and in commemoration of the event a swinging festival was held annually. This had ceased for many years until the return of the old subadar, when, out of respect to the memory of his relative, he restored the temple, and re-established the swinging festival at his own expense. The Pariahs were, it is stated, the principal performers at the village swinging ceremonials, and they received from one to four rupees from a general fund subscribed by the villagers or granted for the purpose by some public-spirited individual. In one report it is mentioned that, on the party who had been accustomed to pay the swingers having left, the villagers, afraid lest a discontinuance of the practice should be productive of calamity, took to swinging sheep and pumpkins, a much more reasonable exhibition of devotion. In cases of famine, cholera, or other calamity, a swinging festival was held for the purpose of propitiating the deity, and, at the same time, a slaughter of goats, sheep, pigs, fowls, and even male buffaloes took place. In the Canara district, on the occasion of a very extensive celebration, the swinging was combined with an extensive slaughter of animals. The pole was erected in the close vicinity of a high heap of reeking heads. All the men, women and children were in holiday attire, and hundreds of the latter were brought close to the heap of heads, and showed intense excitement and enjoyment in witnessing the struggles of the dying animals or in hearing their shrieks.

In front of the Máriyamma temple at Múdabidure in South Canara stands a quadrangular stone, which is hollowed out at the top. It was formerly used as a receptacle for a wooden beam, on which another beam was made to revolve at the hook-swinging festival. The necessary wooden

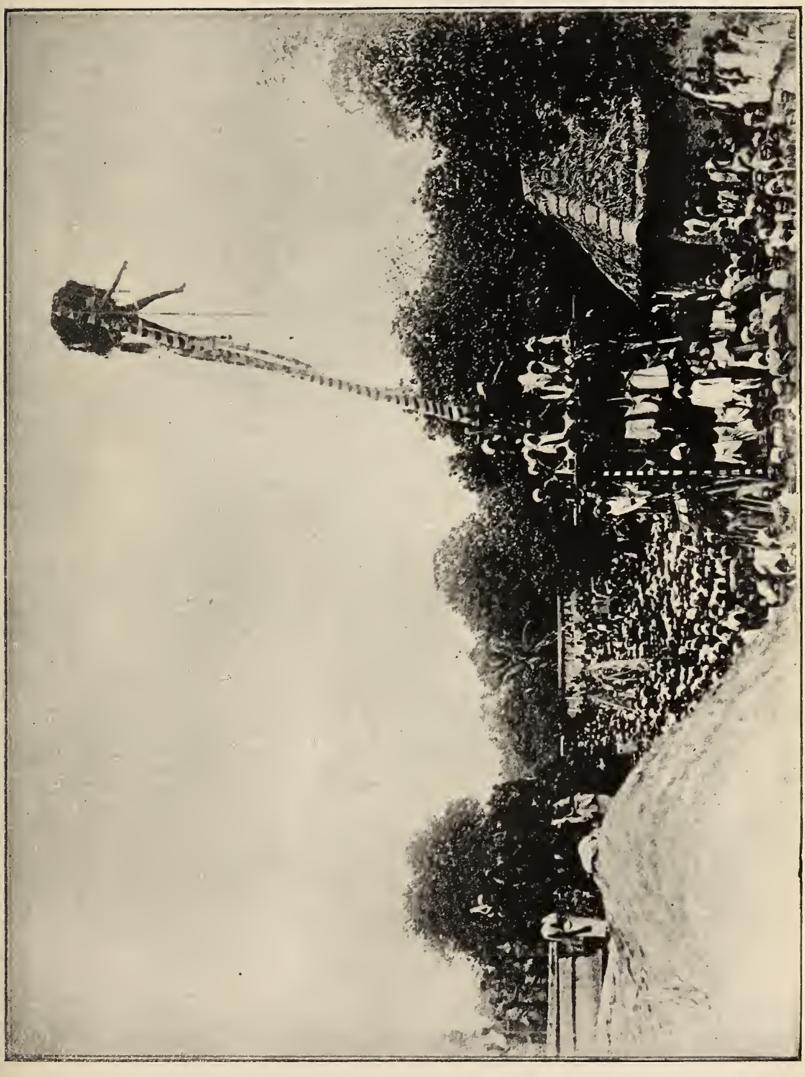
implements are still preserved near the temple.[1] The apparatus for hook swinging still lies outside the Periyapalayam temple near Madras. Of this barbarous ceremony, as carried out at the latter end of the eighteenth century, an interesting account is given by Sonnerat,[2] who thus describes it :—" Those who imagine they have received great benefits from Mariatale, or wish to obtain them, make a vow to suspend themselves in the air. This ceremony consists in passing two iron tenter-hooks, tied to the end of a very long lever, through the skin of the votary's back. This lever is placed at the top of a mast twenty feet high. As soon as the votary is hung on the hooks, they press the other end of the lever, and lift him up in the air. In this state they turn him round as often as he chuses. He commonly has a sword and shield in his hands; and makes the motions of a man who is fighting. He must appear chearful, whatever pain he may feel: for, if tears escape him, he is driven from his cast, but this seldom happens. The votary who is to be hung up drinks some intoxicating liquor, which makes him almost insensible, and looks upon this dangerous preparation as a pastime. After turning him several times round, they take him off, and he is soon cured of his wounds. The quickness of the cure passes for a miracle in the eyes of the zealots of this goddess. The Bráhmans do not assist at this ceremony, which they despise. The worshippers of Mariatale are of the lowest casts."

In the early part of the last century Mr. Elijah Hoole was present as an eye-witness of a hook-swinging ceremony at Royapettah in the city of Madras, of which he gave the following graphic description[3] " A pole, thirty or forty feet high, was planted in the ground perpendicularly, having an iron pivot on the top, on which rested the middle of an horizontal yard or cross pole, which might also be about forty feet in length. This latter was managed by a rope attached to one end, reaching down to the ground, by means of which it could be made to turn upon the centre as fast as the people could run. Near the other end of the cross-pole, attached to a short rope, were two bright iron hooks, and at the extreme end was a short rope, about the length of that to which the hooks were attached. By slackening the

---

[1] E. Hultzsch, Government Epigraphist. 'Annual Report,' 1900–01.
[2] 'Voyage to the East Indies and China,' 1774 and 1781.
[3] 'Personal narrative of a mission to the South of India,' 1820 to 1828.

PL. V.



HUMAN HOOK-SWINGING.

rope for the management of the cross pole, the other end, to which the hooks were attached, was lowered to a platform higher than the heads of the assembled multitude, from whence, when it was raised, was borne into the mid-air a man, with no other dress than a waist cloth, and supported only by the muscles and flesh of the middle of the back, into which were thrust the iron hooks. When the cross pole, thus laden, had regained its horizontal position, it was turned quickly on the pivot, by the persons holding the rope at the other end moving round with it at a good pace. It was impossible to look at the deluded votary of superstition thus painfully suspended without a sickening horror, not merely from an idea of the agonies endured by him, but also from a fear lest the flesh should tear by his weight, and that, falling from a height which would ensure his destruction, he should, by death, complete the sacrifice thus offered to the infernal gods. The rising of the flesh taken up by the hooks seemed to threaten such a catastrophe, and the short rope at the extremity of the pole, being within reach of the person suspended, was perhaps intended to afford, in such a case, some chance of safety. Some of the persons thus suspended appeared fearful of falling, and held constantly by the rope, or, by this means, they perhaps hoped to relieve themselves of some degree of the pain which must be endured. Others, more bold and hardy, made no use of the rope, and, as though happy as well as fearless, thrust their hands into their cloth, and, taking out a profusion of flowers, provided for the occasion, showered then abroad amongst the people, who struggled to catch and preserve them as though they had been blessings from heaven. One fellow, by way of additional bravado, fired a pistol, which he had stuck in his waist for the purpose. I never pressed through the assembled crowds near enough to see the hooks put into the flesh, but was told that the only means used to deaden the pain was a smart blow, given with the open hand, on that side of the back into which the hook was to be inserted. From the indifference with which they mingled with the crowd after the ceremony, and the smallness of the streams of blood I have seen trickling from the wounds, I should suppose that a less quantity of blood than would be imagined is lost by the devotees. I think I have seen five or six persons swing in one day. Swinging is neither practised nor sanctioned by the Bráhmans; at least they have disavowed it to me; and I never observed any besides the lower classes of the Hindoos conducting or participating in the ceremony.

It is said to be observed in consequence of vows made in time of sickness or danger, or for the obtaining of children or some other desired object.

Of the ceremony as performed in recent years at the Kollangodu temple in Travancore, an excellent account is given by the Rev. T. Knowles,[1] from which the following précis has been compiled :—

In front of the temple was a booth containing the image of the goddess Bhadra Káli, a cruel deity, who is supposed to delight in blood at a little distance was the car. The bottom part of this was very much like a lorry used when transporting large logs of timber by means of elephants. There were four solid wheels of thick timber, with a framework, like a railway waggon on a small scale. To this were attached two thick cable ropes. Joined to the sides of the car were two upright posts, about 15 feet high, strengthened with stays and cross-pieces. On the top was a piece of thick timber with a pole in it, and the bottom rounded, which fitted into a cross-piece, and allowed the long beam on which the men were swung to move up or down. This beam was some 35 or 40 feet long, and about 9 inches in diameter. It was placed through the pole in the piece of timber on the top of the upright frame, and balanced in the middle like a huge see-saw. At one end of the pole was a covered canopy, and at the other long ropes were fastened, which trailed on the ground. The whole arrangement of the car was such that, by lowering one end of the long beam to the ground, and fastening a man to it, and then pulling down the other end by the ropes, the man could be raised into the air a height of some 40 feet or more. The whole car could then be dragged by the thick cable ropes round the temple.

While the subject was being prepared for swinging, a mat was stretched above his head, partly to do him honour, partly to protect him from the sun. His head and neck were richly ornamented, and below he was bedecked with peacock's feathers, and clad in a loin-cloth, which would bear some, if not all the weight of his body. Amid the firing of mortars, beating of tom-toms, the screeching of flutes, and the shouts of the crowd, the canopied end of the long beam was lowered, and the devotee, lying prone on the ground, was fastened to the beam by means of ropes passing

[1] 'Wide World Magazine,' September 1899.

PSEUDO HOOK-SWINGING.

under his arms and around his chest. To some of the ropes hooks were fastened. The priests took hold of the fleshy part of the man's back, squeezed up the flesh, and put some four hooks at least through it. A rudely fashioned sword and shield were then given to the man, and he was swung up into the air, waving the sword and shield, and making convulsive movements. Slowly the people dragged the car round the temple, a distance not quite as far as round St. Paul's cathedral. Some of the men were suspended while the car was dragged round three or four times.

The next devotee was fastened in the same way to the beam, but, instead of a sword and shield, the priests gave him an infant in his arms, and devotee and infant were swung up in the air, and the car dragged round the temple as before.

Some children were brought forward, whose parents had made vows about them. The little ones were made to prostrate themselves before the image of Káli. Then the fleshy parts of their sides were pinched up, and some wires put through. This done, the wires were placed in the hands of the relatives, and the children were led round and round the temple, as though in leading strings.

At Madura, Mr. Knowles states, on the occasion of a hook-swinging festival a few years ago, the devotee was swung by hooks alone, and not by ropes and hooks. The pole was longer than that used at Kollangodu, and decorated with coloured cloth something like a barber's pole, and garlanded with flowers. Instead of it being fixed on a car, a large platform was used. The fleshy part of the man's back was first beaten to cause it to swell, and two large hooks were fastened into the flesh.

The Abbé Dubois,[1] in describing the hook swinging ceremony, says that "a priest beats the fleshy part of the back until it is quite benumbed. While suspended the devotee is careful not to show any sign of pain; indeed he continues to laugh, jest, and gesticulate, like a buffoon in order to amuse the spectators, who applaud and shout with laughter. After swinging in the air for the prescribed time, the victim is let down, and, as soon as his wounds are dressed, he returns home in triumph."

---

[1] 'Hindu Manners, Customs, and Ceremonies.'

Some years ago, a man in a village north of the Gódávari river, who had four holes in his loins from previous swingings, complained to the Deputy Commissioner that his occupation was gone, as he was no longer allowed to be swung.

Last year the Governor of Madras was approached by a ryat (agriculturist) on behalf of the community with a request for permission to revive the practice of hook-swinging in a certain village of the Madura district. He represented, with all earnestness, that, since this ceremony had been stopped, the rainfall had been deficient and the crops scanty; cholera had been prevalent; and in families where there were five or six children ten years ago, there were now only two or three.

A ceremony which is closely allied to hook-swinging is the tookum (lifting), which takes place during the kumbhum kodum or pot festival in Travancore, for the following account of which I am indebted to the 'Madras Mail', 1902:—

On a wooden platform is an upright frame, on which is a transverse bar, both ends of which can be raised or lowered at will. Facing the temple there were three such platforms, and each of them was occupied by a man who performed the tookum ceremony. He was fitted with a head gear resembling an old poke-bonnet. From the rim were suspended slender threads of coloured beads and tinsel. On his shoulders rested a pair of wooden epaulettes, which looked gilded. His costume was turkey red and black, and from the waist downwards he was covered with a skirt of peacock's feathers. Under his arms ran a leather band, by which, when the transverse bar was raised, he hung in mid-air. Behind the band were two steel hooks, which pierced the skin very slightly. In his hands each man held a bow and what seemed to be an arrow, and from time to time he shouted and gesticulated in an alarming manner. There was a distinct military air about the dress and demeanour of the men.

As human hook-swinging is forbidden, a pseudo-ceremony has been substituted for it, and was recently performed for my special edification at Chennapatna in the Mysore province. The nature of the apparatus which is erected for the occasion, and decorated with coloured cloths, flags, and leafy twigs of the mango tree, is rendered clear by

SIDI VÍRANNA.

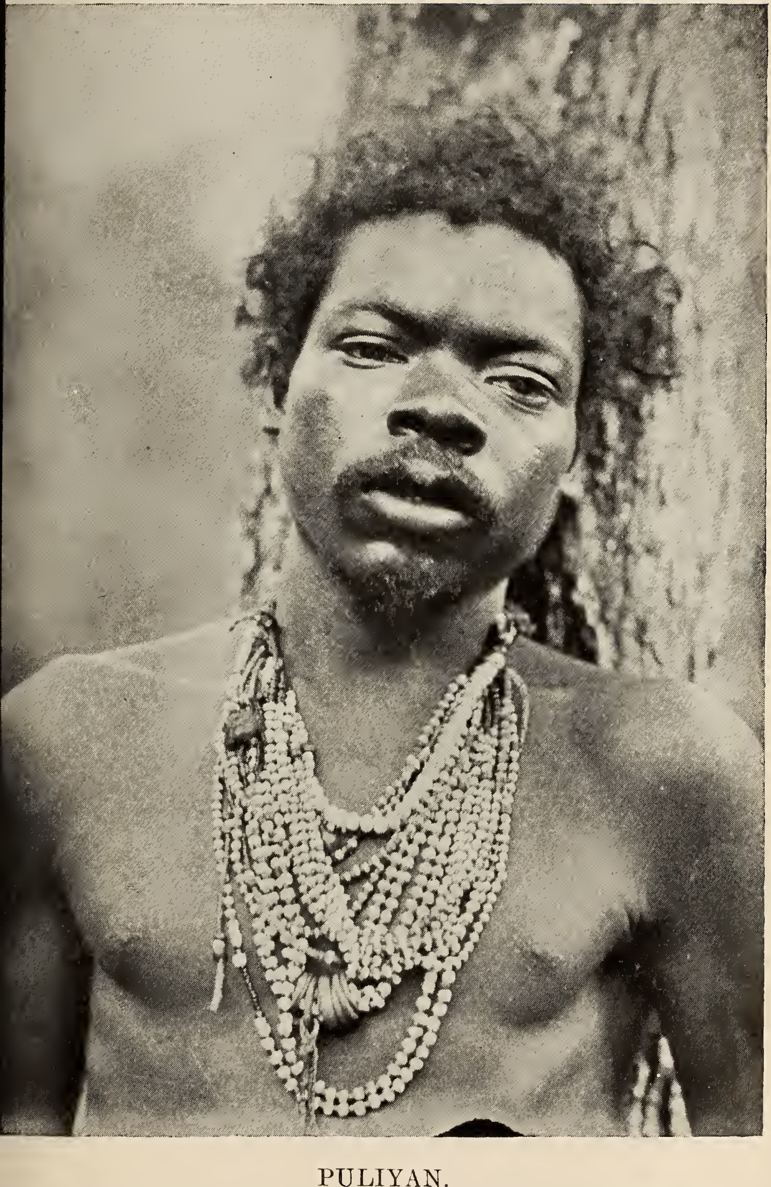
reference to plate VI which shows Sidi Víranna suspended on high, and Máriamma in her shrine carried above its bearer's head. To the top of the framework a brass umbrella and kalásam (brass pot) are affixed. The end of the beam to which the figure of Sidi Víranna (Pl. VII) is suspended is adorned with a canopy with mango leaves tied to it. The goddess Máriamma in her shrine, borne by a pujári, and Sidi Víranna carried by a boy, are conducted to a tank (pond), where they are worshipped, and brought in procession to the scene of the swinging ceremony. To a long beam, which is lowered to the ground, Sidi Víranna, carrying in his hands a sword and shield, and dressed up in a gaudy turban and silk-bordered cloth, is secured by means of a rope made of human hair, which is tied to a hook in the middle of his back. The beam is then hoisted on high, and Sidi Víranna rotated round and round, accompanied by the goddess Máriamma, and Holeya musicians playing weird music will fife and drum. Sometimes a cradle is tied to the beam beneath the canopy, and children are placed in it. And occasionally men, tied to the beam by ropes passed round the waist, are hoisted. The festival usually commences on a Tuesday, and lasts for three days. On the first day the goddess Máriamma is worshipped by Bráhmans only, and on the following day by other castes, who make offerings of fowls and sheep. The swinging of the god is carried on for several hours. At its conclusion, the goddess is taken in procession through the streets, and when the temple is reached, a fire-walking ceremony, called konda, takes place. Over the hot embers strewn in front of the temple, the pujári, with the goddess, walks three times, and enters the temple. It is said that he receives no injury to his feet if he fasts and keeps himself pure on the day of the ordeal.

I am indebted to Messrs. Wiele and Klein for the photographs illustrating the human hook-swinging ceremony.

E. T.

PALIYANS.

In a note on the Malai (hill) Paliyans of the Madura district, the Rev. J. E. Tracy writes as follows :—"I went to their village at the foot of the Periyar hills, and can testify to their being the most, abject, hopeless, and unpromising specimens of humanity that I have ever seen. There were about forty of them in the little settlement, which was situated in a lovely spot. A stream of pure water was flowing within a few feet of their grass huts, and yet they were as foul and filthy in their personal appearance as if they were mere animals, and very unclean ones. Rich land that produced a luxuriant crop of rank weeds was all around them, and, with a little exertion on their part, might have been abundantly irrigated, and produced continuous crops of grain. Yet they lived entirely on nuts and roots, and various kinds of gum that they gathered in the forest on the slopes of the hills above their settlement. Only two of the community had ever been more than seven miles away from their village into the open country below them. Their huts were built entirely of grass, and consisted of only one room each, and that open at the ends. The chief man of the community was an old man with white hair. His distinctive privilege was that he was allowed to sleep between two fires at night, while no-one else was allowed to have but one—a distinction that they were very complaisant about, perhaps because with the distinction was the accompanying obligation to see that the community's fire never went out. As he was also the only man in the community who was allowed to have two wives, I inferred that he delegated to them the privilege of looking after the fires, while he did the sleeping, whereas, in other families, the man and wife had to take turn and turn about, to see that the fire had not to be re-lighted in the morning. They were as ignorant as they were filthy. They had no place of worship, but seemed to agree that the demons of the forest around them were the only beings that they had to fear besides the Forest department. They were barely clothed, their rags being held about them, in one or two cases, with girdles of twisted grass. They had much the same appearance that many a famine subject presented in the famine of 1877, but they seemed to have had no better times to look back upon, and hence took their condition as a matter of course. The



PULIYAN.

forest had been their home from time immemorial. Yet the forest seemed to have taught them nothing more than it might have been supposed to have taught the prowling jackal or the laughing hyæna. There were no domesticated animals about their place : strange to say, not even a pariah dog. They appeared to have no idea of hunting, any more than they had of agriculture. And, as for any ideas of the beauty or solemnity of the place that they had selected for their village site, they were as innocent of such things as they were of the beauties of Robert Browning's verse."

Writing concerning the Paliyans who live on the Travancore frontier near the township of Shenkotta. Mr. G. F. D'Penha states [1] that they account for their origin by saying that, at some very remote period, an Eluvan took refuge during a famine in the hills, and there took to wife a Palliyar woman, and that the Palliyars are descendants from these two. "The Palliyar" Mr. Da Penha continues, "is just a shade lower than the Eluvans. He is permitted to enter the houses of Eluvans, Elavanians (betel-growers) and even of Maravars, and in the hills, where the rigour of the social code is relaxed to suit circumstances, the higher castes mentioned will even drink water given by Palliyars, and eat roots cooked by them. The Palliyars regard sylvan deities with great veneration. Kurupuswámi is the tribe's tutelary god, and, when a great haul of wild honey is made, offerings are given at some shrine. They pretend to be followers of Siva, and always attend the Adi Amavasai ceremonies at Courtallum. The Palliyar cultivates nothing, not even a sweet potato : he keeps no animal except a stray dog or two. An axe, a knife, and a pot are all the impediments he carries. An expert honey-hunter, he will risk his neck climbing lofty trees or precipitous cliffs. A species of sago palm furnishes him with a glairy glutinous fluid on which he thrives, and such small animals as the iguana (*Varanus*), the tortoise, and the larvæ of hives are never-failing luxuries."

The Paliyans, whom I have investigated in North Tinnevelly, were living, in the jungles near the base of the mountains, in small isolated communities separated from each other by a distance of several miles. They speak Tamil with a peculiar intonation, which recalls to mind the

[1] 'Ind. Antiquary,' Vol. XXX, 1902.

Irulas and Paniyans. They are wholly illiterate, and only a few can count up to ten. A woman has been known to forget her own name. At a marriage the father, taking the hand of the girl, and putting it in that of the bridegroom, says: "I give this girl to you. Give her roots and leaves, and protect her." The value of a bride or bridegroom depends very much on the quantity of roots, etc., which he or she can collect. When a widow does not remarry, the males of the community supply her with roots and other products of the jungle. Marriages are, as a rule, contracted within the settlement, and complications occasionally occur owing to the absence of a girl of suitable age for a young man. Indeed, in one settlement I came across two brothers, who had for this reason resorted to the adelphous form of polyandry. It would be interesting to note hereafter if this custom, thus casually introduced, becomes established in the tribe. As an exception to the rule of marriage within the settlement, it was noted that a party of Paliyans had wandered from the Gandamanaikanúr forests to the jungle of Ayanarkoil, and there intermarried with members of the local tribe, with which they became incorporated. A case was narrated to me, in which a Maravar cohabited for some time with a Paliyan woman, who bore children by him. In this way is the purity of type among the jungle tribes diminishing as the result of civilisation, and their nasal index reduced from platyrhine to mesorhine dimensions.

As they carry no pollution, they are sometimes employed, in return for food, as night watchmen at the Vaishnavite temple known as Azhagar koil at the base of the hills. They collect for the Forest department minor produce in the form of root-bark of *Ventilago madraspatana* and *Anisochilus carnosus*, the fruit of *Terminalia Chebula* (myrabolans), honey, bee's-wax, etc., which are handed over to a contractor in exchange for rice, tobacco, betel-leaves and nuts, chillies, tamarinds and salt. The food thus earned as wages is supplemented by yams and roots, which are dug up with a digging stick, and forest fruits. The contractor they implicitly obey, and it was mainly through his influence that I was enabled to interview them, and measure their bodies, in return for a banquet, whereof they partook seated on the grass in two semicircles, the men in front and women in the rear, and eating off teak-leaf plates piled high with rice. Though the prodigious mass of food provided was greedily devoured till considerable abdominal distension was visible,

PULIYAN.

dissatisfaction was expressed because it consisted of vegetable curry with no mutton, and I had not brought new loin-cloths for them. They laughed, however, when I expressed a hope that they would abandon their dirty cloths, turkey-red turbans and European bead necklaces, and revert to the primitive leafy garment of their forbears. A struggle ensued for the limited supply of sandal paste, with which a group of men smeared their bodies, in imitation of the higher classes, when they were about to be photographed. A feast given to the Pulaiyans by some missionaries was marred at the outset by the unfortunate circumstance that betel and tobacco were placed by the side of the food, these articles being of evil omen as they are placed in the grave with the dead.

A question whether they eat beef produced marked displeasure, and even roused an apathetic old woman to grunt "Your other questions are fair. You have no right to ask that." If a Paliyan happens to come across the carcase of a cow or buffalo near a stream, it is abandoned, and not approached for a long time. Leather they absolutely refuse to touch, and one of them declined to carry my camera box because he detected that it had a leather strap.

They make fire with a quartz strike-a-light and steel, and the floss of *Bombax malabaricum* (silk-cotton tree). They have no means of catching or killing animals, birds, or fish with nets, traps, or weapons, but, if they come across the carcase of a goat or deer in the forest, they will roast and eat it. They catch "vermin" (presumably field rats) by smoking them out of their holes, or digging them out with digging sticks made of hard wood. Crabs are caught for eating by children, by letting a string with a piece of cloth tied to the end down the hole. and lifting it out thereof when the crab seizes hold of the cloth with its claws. Of wild beasts they are not afraid, and scare them away by screaming, clapping the hands, and rolling stones down into the valleys. I saw one man, who had been badly mauled by a tiger on the buttock and thigh when he was asleep with his wife and child in a cave. During the dry season they live in natural caves and crevices in rocks, but, if these leak during the rains, they erect a rough shed with the floor raised on poles off the floor and sloping grass roof, beneath which a fire is kept burning at night, not only for warmth but also to keep off wild beasts. They are expert

at making rapidly improvised shelters at the base of hollow trees by cutting away the wood on one side with an axe. Thus protected, they were quite snug and happy during a heavy shower, while we were miserable amid the drippings from an umbrella and a mango tree.

Savari (a corruption of Xavier) is a common name among them. There is a temple called Savarimalayan (Xavier of the hills) on the Travancore boundary, whereat the festival takes place at the same time as the festival in honour of St. Xavier among Roman Catholics.

The women are very timid in the presence of Europeans, and suffer further from hippophobia, the sight of a horse, which they say is as tall as a mountain like an elephant, producing a regular stampede into the depths of the jungle. They carry their babies slung in a cloth on the back, and not astride the hips according to the common practice of the plains. The position, in confinement, is to sit on a rock with legs dependent.

Many of them suffer from jungle fever, as a protection against which they wear a piece of turmeric tied round the neck. The dead are buried, and a stone is placed on the grave, which is never re-visited.

The men, in walking, stride with long steps and a tiger-like swing from the hips.

Their calves are thin, and their chests narrow.

The measurements of the men examined by me were as follows :—

——	Maximum. cm.	Minimum. cm.	Average. cm.
Stature	159·6	13·5	150·9
Mid-finger to patella	11·8	6·	8·4
Cephalic length	18·4	17·1	17·8
Cephalic breadth	14·6	13·	13·5
Cephalic index	79·1	72·8	75·7
Nasal height	4·8	3·8	4·2
Nasal breadth	4·	3·1	3·5
Nasal index	100·2	70·8	82·9

Like other primitive tribes of Southern India, the Paliyans are short of stature and dolichocephalic, and the archaic type of nose persists in some individuals (Pls. VIII and IX).

E. T.